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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/091,658 | 03/04/2002 | Juan-Antonio Sanchez-Herrero | 53806-00005USPT | 7238 |
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| ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024 | | | EXAMINER NGUYEN, THANH T | |
| | | | ART UNIT 2144 | PAPER NUMBER |

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/091,658 | Applicant(s) SANCHEZ-HERRERO ET AL. | |
| | Examiner Tammy T. Nguyen | Art Unit 2144 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/7/02</u> . | 6) <input type="checkbox"/> Other: _____ |



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Detailed Office Action

1. This action is in response to the application 10/091658 filed on March 4, 2002.
2. Claims 1-37 have been examined.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

4. Applicants are required to put (.) after claim 7. Appropriate correction is required

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

the basis for the rejections under this section made in this Office action:

6. A person shall be entitled to a patent unless –
 - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
7. Claims 1-10, 12, 14-20, 22, 25-31, and 34-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al. (USPN 6,681,114 – Date of Patent: January 20, 2004, herein referred to as “Chang”).
8. As to claim 1, Chang teaches the invention as claimed, including in a network resolution domain having a plurality of users identifiers on a per subscriber basis for identifying a user under different service environments, a User Distribution Server (UDS) disposed to determine from a plurality of network servers the specific network server in charge of said user under a particular service environment, said UDS comprising: a secondary database providing storage for user identifiers and In a network resolution domain having a plurality of user identifiers selected service data pertaining to said network servers (fig.3, profile database 107); a mechanism for transferring user identifiers and said selected service data to said secondary database from primary databases associated with respective network servers (fig.3, profile proxy server 108); a querying mechanism disposed to receive a service request from a Service Requester Node (fig.3, 112)(fig.3, message server 106); and a response mechanism disposed to transmit an answer message to said Service Requester Node

in response to said request, said answer comprising information usable by said Service Requester Node (Fig.3, 112) to determine said specific network server (Fig.3, SGSN 152).

9. As to claim 2, Chang teaches the invention as claimed, wherein: said response mechanism transmits an answer comprising, selectively, the specific network server in charge of said user under a particular service environment; a list of possible servers if a redundant configuration exists; and a new user identifier with an indication that another query on said new identifier necessary (see col.6, lines 1-32).
10. As to claim 3, Chang teaches the invention as claimed, wherein said UDS is adapted as a first UDS and said network includes a second UDS, and wherein: said transfer, querying and response mechanism are respectively disposed to transmit data between first UDS and second UDS (see col.8, lines 25-34).
11. As to claim 4, Chang teaches the invention as claimed, wherein: said transferring mechanism comprises operating means for recovering user identifiers and necessary service data from specific network servers acting as primary databases (Fig.3, profile proxy server 108).
12. As to claim 5, Chang teaches the invention as claimed, wherein: the operating means includes means for informing said UDS about needs for updating user identifiers and/or necessary service data at indication from primary databases or another UDS (fig.3).

13. As to claim 6, Chang teaches the invention as claimed, wherein: the operating means includes means for said UDS registering into and withdrawing from all network servers intended for acting as primary databases (fig.3, profile proxy server 108).
14. As to claim 7, Chang teaches the invention as claimed, wherein: the operating means includes means for indicating recovery preferences for recovering user identifiers and/or necessary service data for all served users, for a specific set of users, or only for a particular user (fig.3, 112).
15. As to claim 8, Chang teaches the invention as claimed, wherein: the operating means further includes means for recovering user identifiers and necessary service data selectively, for at least one set of: (a) identifiers of a specific type amongst a plurality of valid identifier types; (b) identifiers used in specific domains; and (c) identifiers belonging to specific identification spaces in a domain. (see col.6, lines 33-65).
16. As to claim 9, Chang teaches the invention as claimed, wherein data sensitive to temporary validity per specific network service include a "Time To Live" (TTL) parameter intended for determining the needs for data recovery from primary databases (see col.1, line 62 to col.2, line 5).
17. As to claim 10, Chang teaches the invention as claimed, further comprising: at least one protocol handler module and, in the event said UDS comprises more than one protocol handler module, a protocol discriminator module, each protocol handler module being in charge of a particular telecommunications protocol (fig.3, IP network 120).

18. As to claim 12, Chang teaches the invention as claimed, comprising: at least one "Diameter" related protocol handler module (fig.3, IP Network).
19. As to claim 14, Chang teaches the invention as claimed, comprising: at least one "Radius" related protocol handler module (fig.3).
20. As to claim 15, Chang teaches the invention as claimed, further comprising protocol and processing means for responding to the service request using an external database not intended for acting as primary database or as another UDS (see fig.3).
21. As to claim 16, Chang teaches the invention as claimed, wherein said external database is a number portability database (see col.4, lines 1-15).
22. As to claim 17, Chang teaches the invention as claimed, including a telecommunications system comprising: at least one subscriber having a plurality of user identifiers for identifying said subscriber under different service environments (Fig.3, 112); a plurality of servers (Fig.2 server 106a, 106b, ...106d); and a User Distribution Server (UDS) for determining a specific network server in charge of said user under a particular service environment, wherein said UDS comprises: a secondary database providing storage for user identifiers and selected service data pertaining to said servers (fig.3, profile database 107); a mechanism for transferring user identifiers and said selected service data to said secondary database from selected servers acting as primary databases (fig.3, profile proxy server 108); a querying mechanism disposed to receive a service request from a Service Requester Node (fig.3, 112)(fig.3, message server 106); and a response mechanism disposed to

transmit an answer in response to said request for use by said Service Requester Node in determining said specific network server (Fig.3, SGSN 152).

23. As to claim 18, Chang teaches the invention as claimed, wherein: relevant user identifiers in at least one of a plurality of primary databases may be submitted for updating to one specific UDS, to a group of UDS, or to all UDS known at said at least one primary database, selectively (Fig.3, profile proxy server 108, profile database 107).
24. As to claim 19, Chang teaches the invention as claimed, wherein: at least one of a plurality of primary databases is arranged for receiving UDS recovery preferences from one specific UDS, from a group of UDS, or from all UDS known at said at least one primary database, selectively, and for updating each UDS accordingly with each of the recovery preferences (fig.3).
25. As to claim 20, Chang teaches the invention as claimed, wherein: the UDS acts as a Subscription Locator Function (SLF) (see col.7, lines 55-61).
26. As to claim 22, Chang teaches the invention as claimed, wherein: at least one of a plurality of specific servers acting as primary databases is a Presence Server (Fig.3, profile proxy server).
27. As to claim 25, Chang teaches the invention as claimed, wherein: at least one of a plurality of Service Requester Nodes is a Mobile Switching Center (MSC) (see col.7, lin55 to col.8, line 10).
28. As to claim 26, Chang teaches the invention as claimed, wherein: at least one of a plurality of Service Requester Nodes is a Signaling Gateway (fig.3, 112).

29. As to claim 27, Chang teaches the invention as claimed, wherein: at least one of a plurality of Service Requester Nodes is a GPRS Supporting Node (fig.3, 112).
30. As to claim 28, Chang teaches the invention as claimed, wherein: at least one of a plurality of Service Requester Nodes is an Application Server (AS) intended for multimedia related use (see col.9, lines 15-60).
31. As to claim 29, Chang teaches the invention as claimed, wherein: at least one of a plurality of Service Requester Nodes is an Open Service Architecture Service Capability Server (see fig.2, servers).
32. As to claim 30, Chang teaches the invention as claimed, wherein: at least one of a plurality of Service Requester Nodes is a Multimedia Messaging Server (fig.3, message server 106).
33. As to claim 31, Chang teaches the invention as claimed, wherein: at least one of a plurality of Service Requester Nodes is a CAMEL Gateway Server (Fig.3, gateway 111).
34. As to claim 34, Chang teaches the invention as claimed, wherein: at least one of a plurality of external databases used for resolution is a number portability database (fig.3).
35. As to claim 35, Chang teaches the invention as claimed, including in a network resolution domain having a plurality of user identifiers on a per subscriber basis for identifying a user under different service environments, and wherein a User Distribution Server (UDS) is disposed to determine from a plurality of network servers the specific network server in charge of said user under a particular service

- environment, a method for operating the UDS comprising the steps of: establishing a secondary database in said UDS for storing user identifiers and selected service data pertaining to said network servers (fig.3, profile database 107); transferring user identifiers and said selected service data to said secondary database from primary databases associated with respective network servers (fig.3, profile proxy server 108); receiving a service request from a Service Requester Node (fig.3, 112)(fig.3, message server 106); and transmitting an answer message from said UDS to said Service Requester Node (Fig.3, 112) in response to said request, said answer comprising information usable by said Service Requester Node to determine and specific network server (Fig.3, SGSN 152).
36. As to claim 36, Chang teaches the invention as claimed, wherein: said transmitted answer comprises, selectively, the specific network server in charge of said user under a particular service environment; a list of possible servers if a redundant configuration exists; and a new user identifier with an indication that another query on said new identifier is necessary (see col.6, lines 1-32).
37. As to claim 37, Chang teaches the invention as claimed, wherein said UDS comprises a first UDS and said network includes a second UDS, and wherein: said transfer, receiving and answer transmitting steps, respectively include data transmission between said first UDS and said second UDS (see col.8, lines 25-34).

Claim Rejections - 35 USC § 103

Art Unit: 2144

38. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

39. Claims 11, 13, 21, 23, 24, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al., (hereinafter Chang) U.S. Patent No. 6,681,114 in view of Richard Paul Ejzak., (hereinafter Ejzak) U.S. Patent No. 6,871,070.

40. As to claims 11 and 32, Chang does not explicitly teach domain name server (DNS). However, Ejzak teaches Domain Name Server (see col.8, lines 58-67). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have a Domain Name Server because it would have provided specific functions that can Translating the name into the IP address.

41. As to claims 13, and 33, Chang does not explicitly teach "Light-Weight Directory Access Protocol (LDAP)". However, Ejzak teaches Light-Weight Directory Access Protocol (LDAP)(see col.6, lines 56-67). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have Light-Weight Directory Access Protocol because it would have provided specific functions that can

make it possible for almost any application running on virtually any computer platform to obtain directory information, such as email addresses and public keys.

42. As to claim 21, Chang does not explicitly teach a Home Subscription Server (HSS). However, Ejzak teaches Home Subscription Server (HSS) (see col.4, lines 13-21, and col.6, lines 26-31). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have Home Subscription Server (HSS) because it would have provided specific functions can be used to provide high-speed connectivity between LANs, such as token ring and Ethernet.
43. As to claim 23, Chang does not explicitly teach Interrogating Call Status Control Function (I-CSCF). However, Ejzak teaches Interrogating Call Status Control Function (see col.7, lines 50-67, and col.10, lines 16-38). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have Interrogating Call Status Control Function (I-CSCF) because it would have provided specific functions to be furnished with the actual name or address of the HSS holding the data for the particular subscriber.
44. As to claim 24, Change does not explicitly teach a Serving Call Status Control Function (S-CSCF). However, Ejzak teaches a Serving Call Status Control Function (S-CSCF) (see col.14, lines 11-42). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have a Serving Call Status Control

Art Unit: 2144

Function (S-CSCF because it would have provided specific functions to be furnished with the actual name or address of the HSS holding the data for the particular subscriber.


Conclusion

45. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Tammy T. Nguyen** who may be reached via telephone at **(571) 272-3929**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 5:00 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding this instant application, please send it to **(703) 872-9306**. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, David Wiley, may be reached at **(571) 272-3923**.

TTN

August 10, 2005


DAVID WILEY
SUPERVISORY PATENT EXAMINER
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